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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/290,579	04/13/1999	HIDEKI ASADA	OSP-8028	1042
466	7590 . 07/29/200	4	EXAMINER	
	t THOMPSON	ALPHONSE, FRITZ		
745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202		FLOOR	ART UNIT	PAPER NUMBER
			2133	1/
			DATE MAILED: 07/29/2004	, 160

Please find below and/or attached an Office communication concerning this application or proceeding.

X

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Office Action Summary		Application No.	Applicant(s)	
		09/290,579	ASADA, HIDEKI	(c
		Examiner	Art Unit	
		Fritz Alphonse	2133	
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	correspondence address	;
THE I - Exter after - If the - If NO - Failur - Any n	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this commun D (35 U.S.C. § 133).	ication.
1)🛛	Responsive to communication(s) filed on 05 F	<u> - ebruary 2004</u> .		
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.		
3)□	Since this application is in condition for allowa closed in accordance with the practice under	ance except for formal matters, pr Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the me	rits is
Dispositi	on of Claims			
4) 🖾	Claim(s) 90,96,98,104 and 106 is/are pending	in the application.		
	4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5)	Claim(s) is/are allowed.			
6)⊠	Claim(s) 90,96,98,104 and 106 is/are rejected.			
7)	Claim(s) is/are objected to.			
8)□	Claim(s) are subject to restriction and/o	r election requirement.		
Applicati	on Papers			
9)🔯 -	The specification is objected to by the Examine	r.		
10)🖾 ¯	The drawing(s) filed on <u>13 April 1999</u> is/are: a)[			
[7] -	Applicant may not request that any objection to the		• •	
11)	The proposed drawing correction filed on		oved by the Examiner.	
42\□ 7	If approved, corrected drawings are required in rep	•		
	The oath or declaration is objected to by the Ex	aminer.		
	nder 35 U.S.C. §§ 119 and 120			
	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(a	ı)-(d) or (f).	
a)L	☑ All b) ☐ Some * c) ☐ None of:  1.☑ Certified copies of the priority document:	e have been assetted		
			an Na	
				_
* S	3. Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	_	В
14)∐ A	cknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(	e) (to a provisional appl	ication).
	☐ The translation of the foreign language pro			
Attachment		•••		
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	/ (PTO-413) Paper No(s). Patent Application (PTO-152)	
S. Patent and Tr	ademark Office			

#### **DETAILED ACTION**

This is in regard to election of species filed on 2/05/2004, in which figure 1 (directed to species #1 corresponding to claims 90, 98, 96 and 106) has been elected by the applicant. This election is final.

### Claim Objections

1. Claim 96 is objected to because of the following informalities: method claim 96 which depends on apparatus claim 90 is improper. Appropriate correction is required.

#### Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 90, 96, 106, are rejected under 35 U.S.C. 102(e) as being anticipated by Shiraki (U.S. Pat. No. 5,844,538).

As to Claim 90, Shiraki (fig. 29) shows an active matrix-type liquid crystal display device comprising a pixel electrode (Cp) and a MOS transistor circuit (TR), the pixel electrode (Cp) being driven by the MOS transistor circuit (TR), the MOS transistor circuit (TR) disposed in the vicinity of a cross-over point of one of a plurality of scanning lines and one of a plurality of signal lines (note the position of the scan signal line and data line in figure 29), the MOS type transistor circuit comprising: a first MOS transistor (TR), in which a gate electrode is connected to the scanning line (i.e., scan signal line), and one of a source electrode and a drain electrode is connected to the signal line (note the position of data signal line in figure 29); and an analog amplifier (109), in which an input electrode is connected to the other one of the source electrode and the drain electrode of the first MOS transistor and a power supply electrode is connected to the scanning line, and an output electrode (common electrode) is connected to the pixel electrode (Cp).

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As to claim 96, method claim 96 corresponds to apparatus claim 90; therefore, it is analyzed as previously discussed in claim 90 above.

As to claim 106, Shiraki (fig. 29) shows an active matrix-type liquid crystal display device, wherein the MOS transistor circuit (TR) is formed by integrating thin film transistors.

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 98 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki.

As to claim 98 Shiraki (fig. 29) shows an active matrix-type liquid crystal display device comprising a pixel electrode (Cp) and a MOS transistor circuit (TR), the pixel electrode (Cp) being driven by the MOS transistor circuit (TR), the MOS transistor circuit (TR) disposed in the vicinity of a cross-over point of a plurality of scanning lines and a plurality of signal lines (note the position of the scan signal line and data line in figure 29), the MOS type transistor circuit comprising:

a first MOS transistor (TR), in which a gate electrode is connected to an Nth scanning line (i.e., scan signal line), N being an integer of 2 or more, and one of a source electrode and a drain electrode is connected to the signal line (note the position of data signal line in figure 29); and an analog amplifier (109).

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Shiraki does not disclose an active matrix-type liquid crystal display device in which a gate electrode is connected to the other one of the source electrode and the drain electrode of the first MOS transistor.

However, this is obvious, it would have been obvious to one of ordinary skill in the art at the time of the invention to connect the electrode of MOS transistor (TR) of the picture element circuit to the other one of the source electrode and the drain electrode of transistor (110), as disclosed by Shiraki (see figure 30). Doing so would increase the performance of the active matrix-type liquid crystal display device.

As to claim 104, method claim 104 corresponds to apparatus claim 98; therefore, it is analyzed as previously discussed in claim 98 above.

#### Conclusion

6. Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (703) 872-9306 for all formal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, P.E., whose telephone number is (703) 308-8534. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (703) 305-9595.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR System, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fritz Alphonse

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July 20, 2004

Guy S. Lamarre Primary Examiner